

**MINNESOTA TURF SEED COUNCIL  
NEWSLETTER  
July 30, 2024**

**PERENNIAL RYEGRASS GROWING DEGREE DAYS (GDD)**

Perennial ryegrass GDD's will be tracked in the 2024 growing season with comparisons to the previous seven years. The accumulation of GDD's will begin after the snow has melted from the perennial ryegrass fields and continue through swathing. A base temperature of 32 degrees F is used for perennial ryegrass (T-Base = 32 F).

- Year to date GDD = 2,806 (Table 1)
- GDD last week (July 22 - 28) = 268; Long term average = 234
- GDD projected in next 10 days = 385 or 38.5/day (Table 1)
- Average GDD for the first week of August = 229 or 32.7/day
- The ten-day forecast suggests warmer than average temperatures for the first week of August. Projected GDD is 38.5/day compared to the long-term average of 32.7/day.

Table 1. Growing Degree Days (GDD), March - July 2017 to March - July 2024 near Roseau MN.

Year	2024	2023	2022	2021	2020	2019	2018	2017	2024 vs. 2023
March	0	0	0	131	30	0	0	90	0
April	296	93	95	236	183	211	184	458	+203
May	653	959	649	640	600	548	815	679	-306
June	859	1,064	959	1,007	995	919	1,007	945	-205
July 1-28	998								
July		985	1,104	1,174	1,179	1,067	1,100	1,123	
Total		3,101	2,807	3,188	2,987	2,745	3,106	3,233	
*July 29- Aug7	385								

\* Forecasted GDD at Roseau for the next 10 days.

**GENERAL CROP CONDITION**

Perennial ryegrass swathing began late last week and will continue this week. The new ten-day forecast suggests temperatures well above average for the first week of August. The projected GDD of 38.5/day compared to 32.7/day will accelerate perennial ryegrass maturity and dry down. Remember as ryegrass seed moisture drops into the low 40's into the 30's seed moisture losses can be over 3% points/day.

One of the challenges with ryegrass swathing decisions this year is the gaps in stands due to winterkill issues in the 2023/2024 crop year. These gaps tend to have ryegrass plants that produce a considerable number of late tillers. These tillers are greener and later than the ryegrass plants that were not influenced by winterkill issues. The swathing decision is a balancing act, not to cut the late-maturing seeds too early and the early-maturing seeds too late. When ryegrass is cut too early (high seed moisture content) will shorten the seed filling time which leads to immature seeds and reduced seed size and weight. Cutting too late (lower seed moisture) will reduce seed yield due to increased shatter in the swathing and harvesting operations.

## **CROP MANAGEMENT**

Spring wheat harvest is still a few weeks away; however, wheat straw management is a critical step in maximizing the yield potential of the 2025 perennial ryegrass crop. If the wheat straw is spread out the back of the combine, strive for a uniform straw pattern. If baling, move bales off the field so bales do not smother the young ryegrass seedlings. A light harrow after an application of P&K will help move straw clumps that can act as a blanket and smother the young ryegrass plants. When harrowing wheat straw make sure the straw flows through the harrow, if the straw clumps or balls up, the straw is too damp, so wait for it to dry out.

## **PEST MANAGEMENT**

Isolated pockets of grasshoppers have been observed that required an insecticide treatment. Grasshoppers tend to move to ryegrass fields from other crops or field ditches. A management consideration is to spray a couple spray widths into the perennial ryegrass field.

## **Rust on ryegrass underseeded to wheat**

Leaf rust has been observed on perennial ryegrass underseeded to wheat. Rust on these young ryegrass plants look bad, but several research trials over the years has indicated that a fungicide application in the late summer, or early fall will not reduce the infestation of rust the following year as leaf and stem rust does not over winter in the cold temperatures of northern MN. Rust spores that infect perennial ryegrass are blown into the area from southern states each year. A fungicide trial conducted in cooperation with Amundson Brothers a few years ago was effective in preventing rust on ryegrass and it even kept the wheat straw golden brown until late in the fall. However, the following spring no difference was observed between the fungicide treated and untreated ryegrass.

Next week's newsletter will be released on August 6<sup>th</sup>.